

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
27 October 2005 (27.10.2005)

PCT

(10) International Publication Number
WO 2005/100592 A1

(51) International Patent Classification⁷: C12Q 1/60

(21) International Application Number:
PCT/US2005/012628

(22) International Filing Date: 13 April 2005 (13.04.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/561,585 13 April 2004 (13.04.2004) US

(71) Applicants (for all designated States except US): **RUSH UNIVERSITY MEDICAL CENTER** [US/US]; Suite 456, 1700 West Van Buren Street, Chicago, Illinois 60612-3244 (US). **THE UNIVERSITY OF CHICAGO** [US/US]; 5555 South Woodlawn Avenue, Suite 300, Chicago, Illinois 60637 (US). **STECK, Theodore, L.** [US/US]; 5421 South Cornell Avenue, Chicago, Illinois 60615 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **LANGE, Yvonne** [ZA/US]; 5421 South Cornell Avenue, Chicago, Illinois 60615 (US).

(74) Agent: **KASSEL, Mark, A.**; Foley & Lardner LLP, 150 East Gilman Street, Post Office Box 1497, Madison, Wisconsin 53701-1497 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: A PHARMACOLOGIC METHOD OF LOWERING CHOLESTEROL PRODUCTION

(57) Abstract: The present invention provides a screening method for identifying test agents that modulate cell membrane cholesterol activity. The modulating activity of the test agents may be measured using lytic compounds, which cause cell lysis or increases in cell permeability in response to cell membrane cholesterol levels. The invention further provides therapeutic agents that are identified using the screening method. The therapeutic agents either increase or decrease the cell membrane cholesterol activity, cholesterol concentration and/or both *in vivo* and/or *in vitro*.



WO 2005/100592 A1